

REMARKS

This responds to the Office Action mailed on November 14, 2006. By this amendment claim 1 is amended, and claims 15 and 16 are added. As a result, claims 2-16 are now pending in this application. It should be noted that the subject matter of new claim 15 is fully supported by the specification as filed. Applicants refer the Examiner to Figs. 1, 2, 5 and 6, in which the claimed subject matter is clearly illustrated. In addition, support for new claim 15 can also be found in the detailed description and the claims as originally filed in this case. New claim 16 is also supported by the Figs., specification and claims as originally filed. Reconsideration of this application is requested in view of the above amendments and the following remarks.

A. Rejection: Claims 1-8 and 14 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hershey (U.S. Patent No. 5,867,963) in view of Zusman (U.S. Patent No. 4,156,995).

B. Response: In order for the Examiner to establish a *prima facie* case of obviousness, three base criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference or references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *M.P.E.P.* § 2142 (citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed.Cir. 1991)).

Claim 1, as now amended, recites "...an openwork web structure joining said chords; said web structure comprising a series of connector members formed of inclined branches and adhesively secured to said lower and upper chords; each said inclined branch of said connector members ... having adjacent side edges adhesively joined to one another...the adjacent side edges of the at least two planks defining a plane crossing the substantially parallel planes of the elongated lower chord and the elongated upper chord at an angle other than substantially perpendicular, wherein the branches of a V-shaped structural element each have a first surface

against the lower chord, and are joined by second surfaces against one another and generally transverse to the substantially parallel planes of the chords.” The Examiner admitted in the previous Office Action dated January 3, 2005 (see page 3) that Hershey does not teach each said inclined branch of said connector members being formed of at least two planks each having a rectangular cross-section including opposite side faces and opposite side edges and having adjacent side edges adhesively joined to one another.” (emphasis added). In the previous Office Action (dated March 23, 2006) and the current Office Action (dated November 14, 2006) the Examiner again admits that Hershey is “...is silent with regards to how his connector members are joined.” The Examiner then relies on Zusman for teaching “...that it is known in the art to adhesively secure two connector members (17) along the ends.” (See page 3 of the March 23, 2006 Office Action). However, an electronic search of the Zusman reference on the USPTO’s own web site fails to yield any result for the term adhesive in the Zusman reference. As a result, the Examiner has failed to make a proper *prima facie* case of obviousness since the prior art references cited by the Examiner simply fail to teach or suggest all the claim limitations.

The Zusman reference does mention the term “join” as set forth in the following paragraph:

Referring to FIG. 1 of the drawings, it will be seen that the truss members 11B and 12B are preferably made of **three separate truss units** formed of two by fours **joined together** to form a basic cross support across the foundation wall 14. The tie-down straps 13 are placed on either side of the truss intersections along the perimeter of the foundation wall 14 to help secure the cantilevered truss construction 10 to the foundation wall 14. The truss members 12A and 12B are preferably made of **two separate truss units** formed of two by fours **joined together**. (See column 2, lines 29-39 of the Zusman reference—emphasis added)

The Zusman reference, therefore, also fails to meet the language of claim 1 which requires “A structural wooden joist comprising: a) an elongated lower chord; b) an elongated upper chord ... and c) an openwork web structure joining said chords; said web structure comprising a series of connector members formed of inclined branches...each said inclined branch of said connector members being formed of at least two planks each having a rectangular cross-section...” Zusman actually teaches ganging two separate truss units, or three separate truss units together. Each separate truss unit of Zusman teaches inclined branches having a

single plank between the upper and lower chords of the truss. Therefore, Zusman also fails to teach or suggest the language of claim 1.

Even if Zusman could be interpreted to meet the language set out in the immediately preceding paragraph, Zusman fails to teach the orientation of the at least two planks as now claimed. The planks of the inclined branches have adjacent sides which form a plane that is perpendicular to the planes of the upper chord and the lower chord. Therefore, the structure shown in Zusman does not teach or suggest that the adjacent side edges of the at least two planks define a plane crossing the substantially parallel planes of the elongated lower chord and the elongated upper chord at an angle other than substantially perpendicular, as recited in claim 1. In addition, Zusman also fails to teach the specific arrangement of the branches now set forth in claim 1 "...wherein the branches of a V-shaped structural element each have a first surface against the lower chord, and are joined by second surfaces against one another and generally transverse to the substantially parallel planes of the chords." Therefore, neither the Hershey reference (silent as to the connection of the elements) nor the Zusman reference teaches the arrangement of elements as now set forth in claim 1. Therefore, the combination of Hershey and Zusman fails to make a proper prima facie case since the prior art reference fail to teach or suggest all the claim limitations. The claim limitations include the arrangement of the elements.

The Examiner seems to rely on the lamination of certain portions of the structure shown in Hershey in his argument. However, the lamination in Hershey on which the Examiner seems to place the emphasis is not in the connector members, but rather in lamination portion of a laminated beam, as set forth below:

"As seen in FIGS. 4 and 5, the separate trimmable insert 60, instead of being a separate wooden I-beam type insert, such as the insertable trim member 34A of truss 20, comprises a section of a glued laminated beam. Preferably, such a glued laminated beam 60 is of the type formed of individual boards, such as generally denoted by reference member 74 (typically from boards such as two by fours, two by sixes, two by eights, and the like) which are glued together under pressure. In effect, the upper one of such boards acts as an upper sub-chord 61, while the lower one of such boards acts as the lower sub-chord 63, of insertable trim member 60. Thus, the metal connector plates 66, 68 can respectively secure the upper and lower sub-chords 61, 63 to the upper and lower chords 62, 64. One known preferred commercially-available glued laminated beam, from which an insertable trim member 60 can be made, is available from GluLam Tech., under

the name GLT (trademark).

This alternate type trimmable truss 58, with a glued laminated beam section used for the insertable trim member 60, can be used in very heavy commercial and industrial applications, ie. where significant additional structural strength of the truss 58 is required, or perhaps where additional surface and cross section dimension is required for installation and fastening to the associated supporting structure.” (see column 7, lines 1-25 of Hershey).

In addition, the connections of which the Examiner relies on are of chord members, not the connector members. The finger joints are for attaching chord members 20, 22). Thus, it seems that much of the language the Examiner relies on in the rejection is not associated with the connectors, but other portions of the truss.

Additionally, the Zusman reference teaches away from these limitations on the arrangement of the elements. Zusman teaches forming separate truss units and then ganging them. Zusman would have to assemble the resulting truss units in a totally different way which would be much more complex than ganging several separate truss units together. This teaching away is evidence against a reason to combine Zusman and Hershey to yield applicant’s invention. For the reasons set forth above, claim 1 overcomes the Examiner’s rejection under 35 USC § 103(a) as being unpatentable over Hershey (U.S. Patent No. 5,867,963) in view of Zusman (U.S. Patent No. 4,156,995).

Claims 2-8 depend, either directly, or from claim 1 and include the limitations of claim 1 by their dependency. As a result, applicant believes that the Examiner’s rejection of claims 2-8 are now also improper for the reasons set forth above with respect to claim 1.

Claim 14 recites “A structural wooden joist, comprising: a first elongate chord; a second elongate chord spaced apart from the first chord; a web structure joining the first chord and the second chord and forming openings between the first chord and the second chord, the web structure including a series of **V-shaped arrangements comprising two connector members, each connector member comprising a first plank and a second plank**, the first plank having a first side, a first end, and a second end, second plank having a second side, a third end and a fourth end, **the first side being adhesively secured to the second side**, the first and third ends being adhesively secured to the first chord, and the second and fourth ends being adhesively secured to second chord, wherein **the first side and the second side define a plane crossing the**

first elongate chord and the second elongate chord at an angle other than substantially 90 degrees.” (Emphasis added). The combination of Hershey and Zusman fail to make out a proper *prima facie* case of obviousness. Neither Hershey nor Zusman teach or suggest adhesively bonding the first side of the first plank and the second side of the second plank, as recited in claim 14. In addition, Zusman teaches ganging either two separate truss members or three separate truss members to form a cantilevered cross truss construction. Each separate truss uses a single plank for the connector members of the v-shaped arrangements rather than a first plank and a second plank. Even if one was to somehow interpret Zusman to include the two planks per connector member, the planks are not orientated so that **first side and the second side define a plane crossing the first elongate chord and the second elongate chord at an angle other than substantially 90 degrees**, as recited in claim 14. The Hershey reference teaches that multiple members can be used, but does not show or teach any orientation, much less the orientation set forth in claim 14. Accordingly, claim 14 now overcomes the Examiner’s rejection under 35 USC § 103(a) as being unpatentable over Hershey (U.S. Patent No. 5,867,963) in view of Zusman (U.S. Patent No. 4,156,995).

C. Rejection: Claims 9-13 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hershey (U.S. Patent No. 5,867,963) in view of Zusman (U.S. Patent No. 4,156,995).

D. Response: Claims 9-13 depend, either directly, or from claim 1 and include the limitations of claim 1 by their dependency. As a result, applicant believes that the Examiner’s rejection of claims 9-13 are now also improper for the reasons set forth above with respect to claim 1.

Miscellaneous Remarks

Claim 1 has now been amended to include “...the branches of a V-shaped structural element each have a first surface against the lower chord, and are joined by second surfaces against one another and generally transverse to the substantially parallel planes of the chords. It

should be noted that support for this amendment can be found in Figs. 1, 2, 5 and 6, in which the claimed subject matter is clearly illustrated, as well as in the detailed description and the claims as originally filed in this case.

RESERVATION OF RIGHTS

In the interest of clarity and brevity, Applicant may not have addressed every assertion made in the Office Action. Applicant's silence regarding any such assertion does not constitute any admission or acquiescence. Applicant reserves all rights not exercised in connection with this response, such as the right to challenge or rebut any tacit or explicit characterization of any reference or of any of the present claims, the right to challenge or rebut any asserted factual or legal basis of any of the rejections, the right to swear behind any cited reference such as provided under 37 C.F.R. § 1.131 or otherwise, or the right to assert co-ownership of any cited reference. Applicant does not admit that any of the cited references or any other references of record are relevant to the present claims, or that they constitute prior art. To the extent that any rejection or assertion is based upon the Examiner's personal knowledge, rather than any objective evidence of record as manifested by a cited prior art reference, Applicant timely objects to such reliance on Official Notice, and reserves all rights to request that the Examiner provide a reference or affidavit in support of such assertion, as required by MPEP § 2144.03. Applicant reserves all rights to pursue any cancelled claims in a subsequent patent application claiming the benefit of priority of the present patent application, and to request rejoinder of any withdrawn claim, as required by MPEP § 821.04.

CONCLUSION

Applicant respectfully submits that the claims are now in condition for allowance, and notification to that effect is earnestly requested. Reconsideration of this application is respectfully requested. The Examiner is invited to telephone Applicant's attorney at (612) 373-6977 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

Respectfully submitted,

ROBERT VEILLEUX ET AL.

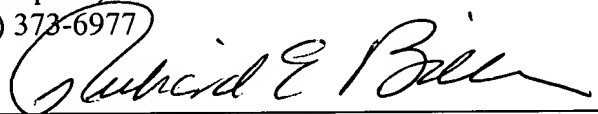
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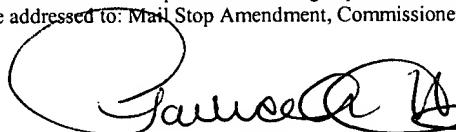


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CERTIFICATE UNDER 37 CFR 1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: Mail Stop Amendment, Commissioner of Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 16TH day of April 2007.

PATRICIA A. HULTMAN

Name



Signature